

IN THE ABSTRACT:

Please replace the original Abstract of the Disclosure with the attached Substitute Abstract of the Disclosure.

SUBSTITUTE ABSTRACT OF THE DISCLOSURE

A vibration generator can be used for seismic applications, producing vibrations for exploration of near-surface subsoils up to 150 meters. Containing two coils activated with AC current or other electrical pulses, the generator is coupled to the object to be investigated by suitable elements. Inside is an inner housing, the outer housing movably supporting, on opposing sides, two coils connected through the inner housing. One coil is activated continuously and alternates with a positive wave component of an AC current control signal; at the same time the other coil alternates with a negative wave component. The result, a controlled vibratory motion, is also achieved with DC voltage. Because of the law of action and reaction, the vibratory motion passed to the coupling elements allows motion into the object being investigated. In contrast to conventional moving coil systems for electromechanical vibration transduction, this generator is based on a soft-metal magnetic instrument.